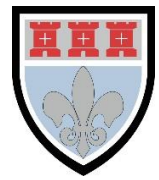


St Mary's Catholic School



Independent Study Skills

2023-2024



Introduction

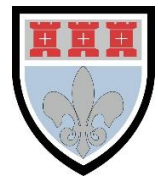
- As you prepare for the next phase of your education, your thoughts will no doubt be turning to what it might be like.
- Studying at a higher level can be both an exciting and daunting prospect, but we think any apprehensions can be alleviated with effective preparation.
- Therefore, this booklet offers you some guidance on some of the ways to prepare yourself to be a more independent learner.
- This booklet offers some guidance on key study skills such as: note-taking, time management, researching, and boosting your memory. For some tasks, you will work in the booklet, for others you will need to work on paper.
- This booklet is designed to be a resource you can work your way through, and use later on as a source of reference once your course is underway. We have pulled together a range of activities and advice – including some from leading universities – that will help you to prepare for studying at a higher level.
- At the end of the booklet, there are some suggestions of websites and free online courses that might be useful to you, that you can work through at your own pace.

Good luck!



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Note Taking

It might sound obvious, but it is worth remembering why effective note taking is important

- Note taking is perhaps an under-rated skill, and maybe one we take for granted.
- It assists you in formulating your ideas, and helps you record your thought processes
- It assists you in concentrating on and understanding the information you are reading, by helping you to summarise the ideas and arguments in the text.
- It allows you to focus on the points relevant to your purpose.
- Well-organised notes make the writing and revision process much more efficient.
- Notes developed using an active and critical approach will also allow you to refine your argument before you begin writing.

Different ways of making notes

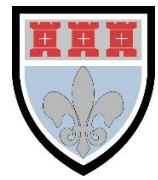
There is no right or wrong way to make notes. You will want to establish a way of working that suits your personality and way of learning and keeping organized.

There are two different approaches to consider:

- ❖ **Taking notes:** from lessons, discussion, lectures, seminars/tutorials, listening to podcasts and other audio recordings
- ❖ **Making notes:** from text based sources, textbooks, research, critical material, your own notes, a handout

How to take notes from speech / dialogue / discussion

- Taking notes while someone speaks is a tricky multi-task. You will be concentrating on what is being said, formulating your own view on what is being said, and capturing the point in note form.
- It is often assumed that students know how to take notes in this sort of situation.
- Therefore, some practical advice on note-taking:
 - Double space lines and leave wide margins so you can add to your notes at a later point.
 - Always write the date and title – this sounds very obvious – but it will help you with your filing and keeping your notes organized.
 - Make sure you note and underline or highlight key words / terms / phrases.
 - Leave out words like 'the', 'and', 'a', 'an' etc.
 - Use abbreviations that make sense to you. This will help speed up your writing.
 - Always go over your notes as soon as you can after the lesson / seminar / lecture and write them up as soon as you can. This will help memory and retention and it is easier to decipher notes taken quickly the sooner you return to them.
- If you're watching an online documentary, or film, and you can, watch the whole thing once before writing anything down. Get a sense of the 'whole' first and then reflect on it. This will help you, when you watch for a second time, to think about what you are looking for, and what to focus on.



Making notes from written sources

1. When making notes from a handout – read through the text and highlight or underline the key words and main ideas. Then write a summary in your own words, adding your own comments or responses in a different coloured pen.

2. When making notes from a textbook – read through the text, then note down a useful subheading, then key words and ideas. It can sometimes be useful to try and summarise each paragraph in one sentence. This helps you focus on what the really important points are.

3. When making notes from your own lesson notes – to remember the information effectively, it is best to return to your lesson notes the same day. Research has shown that after only 10 minutes your ability to recall knowledge begins to decline sharply and by the end of 24 hours you may have only retained as little as 20% of the information unless you have reviewed it.

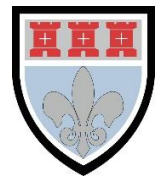
It cannot be stressed too strongly how important it is to get into the habit of writing up / reading through your lesson notes on a daily basis so that you can make a record of your study from which you can revise later.

Some suggestions for writing up notes

- Experiment with different techniques and formats until you find a style of note-making which works for you – this will often mean different approaches for different tasks.
- Always keep in mind why you are making notes. Some notes, such as those made as preparation for a discussion or a lesson, need less care than those which are to be used for revision.
- It is worth spending time on revision notes to avoid panic later. The best notes help us structure our own thoughts, so we can recall and use them quickly. Therefore, you shouldn't take note of anything that you don't understand, that you have simply copied or is irrelevant. *Your notes should be a reflection of your own thinking.*

Therefore:

- Write legibly - if you have difficulty revising from your own handwriting, use a word-processor. This method has the advantage of allowing you to insert more information. You can also make your own exercises for revision before your exams.
- Make your notes visually appealing – leave plenty of spaces and use colour to organize your ideas. For example, quotations or keywords can be written in a different coloured ink.
- Use pictures, symbols and diagrams to illustrate your notes. These may help with recall, and will also break up large chunks of text to reinforce an idea in a different way.
- Use headings, sub-headings and bullet points. This will make it easier to find information and to learn from your notes.
- Use abbreviations – don't write in full sentences.
- Use block capitals or underlining for key words.
- Gaps – avoid notes that are too crowded or dense. To avoid this, leave plenty of gaps between your points. This also gives you the opportunity to add other related things as you come across them in your reading.
- Don't copy out chunks from books. Always put notes into your own words. Note taking should be an active process, that works alongside and documents your thinking.



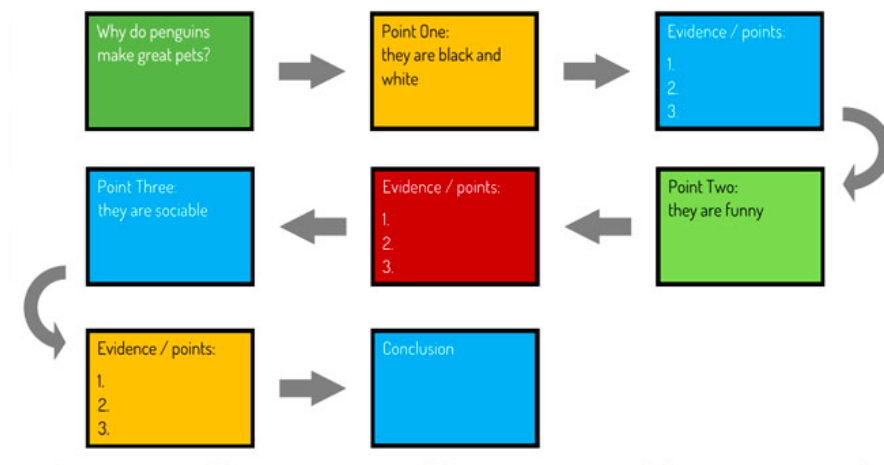
Different ways of recording your notes

The following methods for recording notes comes from the Newcastle University website, and can be found at www.ncl.ac.uk. The university has a brilliant webpage for Sixth Form students to help with study skills and using the Robinson Library.

Flowcharts

A flow chart is a visual way of summarising the information you have found. It is useful in helping to show how you will write your essay as each box can represent a paragraph.

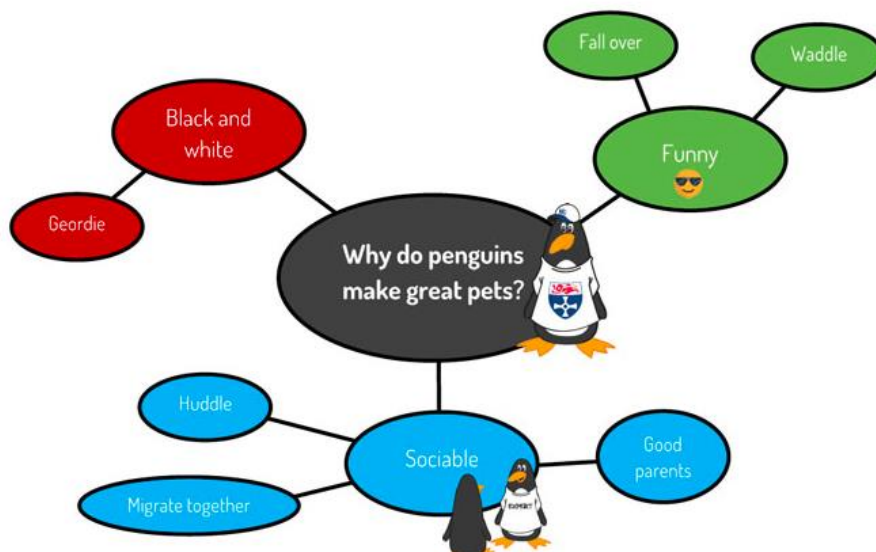
Example:

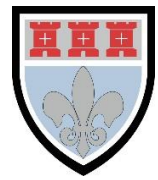


Spider diagrams

A spider diagram is a visual way of summarising the information that you have found. The central area of research is put in the middle and then around it are the key points. Evidence that illustrates these key points are then linked to it.

Example:



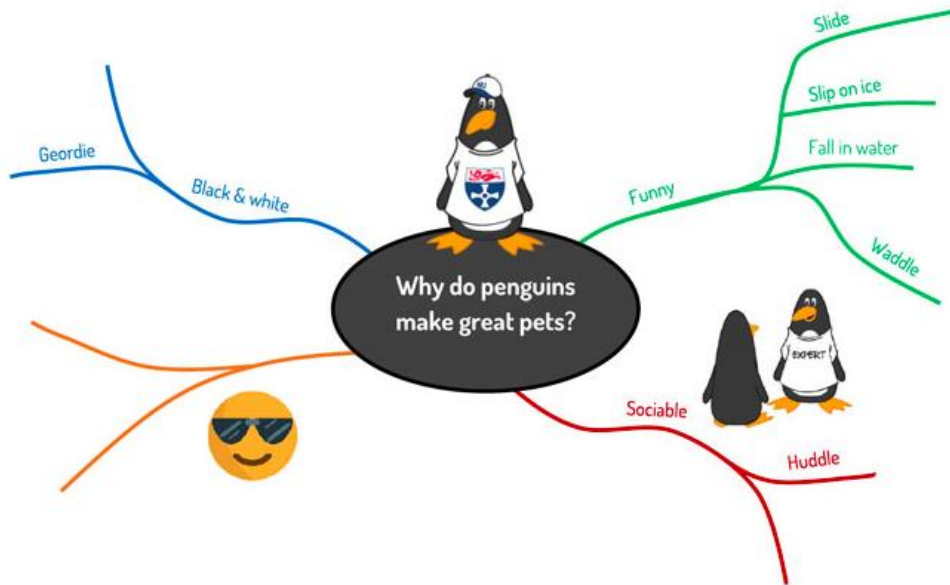


Mind maps

A mind map is a visual way of summarising the information you have found out.

- There are many different ways of doing mind maps.
- The one shown here places the main area of research in the centre and then the arguments/key points are written on the branches coming from the centre.
- The branch then separates into the necessary number for you to write the specific detail or example to prove that point.

Example:



Bullet points

Bullet points are a linear method of note taking and can work well when doing an initial read of relevant information.

Top tips

Use a new bullet point for each new point and list below the evidence that proves the point.

Why do penguins make great pets?

- They are black and white
 - Geordie
 - Distinct
- They are funny
 - Fall over
 - Fall in water
 - Slide
 - Slip on ice
 - Waddle
- They are sociable
 - Huddle
 - Good parents
 - Migrate together

Sub questions

This is a linear method of note taking, which could incorporate bullet points. The emphasis is on constantly questioning and digging deeper until you get the answer to the specific question.

Top tips

For each point, make sure you link back to the overall question to stay focussed.



Tables

Arguably both a linear and visual way of summarising your notes. Use the structure of the table to help structure your notes and begin planning your essay by putting the detail part of your notes under the correct key point headings.

Tip: create your table in advance of making your notes to provide structure in your note taking.

Why do penguins make great pets?		
Characteristics		
Point 1 <ul style="list-style-type: none"> ▪ Sociable <ul style="list-style-type: none"> ▪ Huddle together for warmth 	Point 2 <ul style="list-style-type: none"> ▪ Good parents <ul style="list-style-type: none"> ▪ Share responsibility ▪ Dad looks after the baby 	Point 3
Appearance		
Point 1 <ul style="list-style-type: none"> ▪ Black and white <ul style="list-style-type: none"> ▪ Geordies 	Point 2	Point 3



Note Taking Tasks

1. Watch the following BBC documentary:

- <https://www.youtube.com/watch?v=WTrsfzhcNlk>

Using the strategies suggested to you, make notes on the argument for and against euthanasia.

2. Summarise the following in an appropriate note form:

In April 1998 news broke of a 73 year old Austrian father, Josef Fritzl, who, when police arrested him, confessed to having imprisoned his daughter in a cellar for 24 years and fathered her seven children. The case has been described as one of the worst in Austria's criminal history. This is not the only case of its kind. A Californian girl was locked away by her father from the age of two until she was thirteen years old. The girl's father claimed he thought the girl had brain damage and this was the reason he locked her away. The mother was nearly blind and was restricted to moving around in a wheelchair. The girl stayed in the room with the curtains closed and the door shut. Her food was given to her in the room and she had access to an infant's potty throughout her entire time in the room. For some reason, her father barked at her instead of talking to her and beat her if she even made a noise. In 1970, the mother 'escaped' and called the police who rescued the girl. Psychologists at a nearby university looked after her while studying her progress. They called the girl Genie, as she appeared to emerge into the world, as in the story Aladdin. Genie was described initially as, "unsocialised, primitive, hardly human." She underwent several tests and it was concluded she was not suffering from brain damage. Eventually she learned to dress like other children, but she was silent most of the time and her language never progressed beyond that of a three year old. Some people argue that there is a critical period when children must learn speech and if a child misses this time slot, it is very difficult to develop 'normal' speech. If children are neglected, as Genie certainly was, during this critical period, they might never learn all the patterns of behaviour usually expected of children and adults.



Different Types of Reading

Reading is one of the core activities of studying. At A-level and undergraduate level you are faced with three particular challenges:

- The volume of reading
- The complexity of the material you will read
- Trying to remember what you have read.

Skilled readers vary their reading speed and method to suit both the material they are reading and their purpose in reading it. You 'read' a take-away menu rather differently than a novel. There are several different approaches to reading. Here are some of the main techniques you can use:

- **Skimming:** this involves looking quickly through the text and reading only things like contents, headings, introductions and conclusions. It is a quick and efficient way of familiarising yourself with a publication, and it is useful if you wish to check whether a book is relevant, or for finding particular information or ideas quickly. Skimming is particularly useful for finding your way around a publication. You may skim the newspaper to find the articles you want to read, or a textbook to identify a relevant chapter.

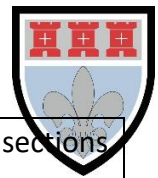
How to skim

- Before you start reading, know what you are looking for or what you want to get from the text you are reading.
- Think of the 2 or 3 terms, or items that you want to find and keep an eye out for these specific terms, or related terms as you skim.
- Sounds a little bit strange, but read vertically as well as horizontally. Skim reading is a little bit reckless, but is about speed, finding the information you want as quickly as you can.
- Read the first sentence in each paragraph as it will give you a sense of what will follow in that section / paragraph.
- Read the last sentence in each paragraph.
- Use subheadings as they will signpost what information you might find in a section of text.

- **Scanning:** this is a very rapid search for important points. It may be a diagram, a title or a key word. The essential thing is that you deliberately ignore everything except the one item for which you are scanning. Scanning is useful when you want to identify a particular piece of information – for example some specific chemical formulae.

How to scan

- Concentrate on the material you are reading. Your mind might be tempted to drift, but keep entirely focused on what is in front of you.
- Scan for the 2 or 3 terms that describe or are linked to the information you want to extract.
- If reading an article online, use the 'Find' function. (Press Ctrl + F)
- Look at all italicized words.



- Remember to use the index or table of contents for signposting towards relevant sections and pages of a text.

Skimming and scanning the news

We read in different ways. You don't always need to read every word. Sometimes you leave bits out.

You can **skim** to find out what it is all about.

Headings and pictures can help you do this.

Or you can **scan** to look for important information.

Look for key words or numbers to help you do this.

Cat up a tree? Chimp in a chimney?

Fire crews in the capital had to help **620 animals** last year. The fire brigade says if an animal is stuck call the RSPCA first.

Unusual rescues

Unusual rescues include a chimp in a chimney, a parrot trapped in its cage, an iguana stuck on a roof and a hamster trapped in a disabled lift. Fire crews have also captured a snake at a retirement home and rescued a kitten with its head stuck in a bongo drum.

More important work

The commissioner says, "Our crews are highly trained emergency service personnel. When we are out rescuing animals, we can't attend real emergencies."

Wasting tax payers' money


"Animal rescues cost money and in these tough financial times many people question why their taxes are being spent on animal rescues. After all, when was the last time you saw a cat's skeleton up a tree?"



- **Reading to understand:** this involves detailed study of a chapter, passage or article in order to absorb all the major facts and ideas. You may read it more than once, and take notes to summarise what you have read. Reading to understand is useful when you want to study something thoroughly.
- **Word-by-word reading:** very occasionally you actually need to read every word extremely carefully – for example, when reading an English Literature text or an exam question.



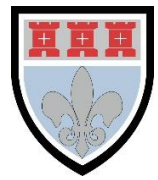
Task – Skimming and Scanning

			
<p>19.00 The One Show</p> <p>The One Show team bring viewers the stories that matter from across the country.</p>	<p>19.00 Escape to the country</p> <p>A couple from Wimbledon want to escape the suburbs for countryside living in East Sussex.</p>	<p>19.00 Top Gear</p> <p>The team sets out to end the chaos that snowfall brings to Britain every year.</p>	<p>19.00 World News Today</p> <p>The latest news, exploring the day's events from a global perspective.</p>
<p>19.30 Waterloo Road</p> <p>Sambuca enlists Lauren and Finn's help to track her father down in Blackpool.</p>	<p>19.30 Springwatch</p> <p>Iolo Williams takes to the water to reveal puffins at their best - diving for fish.</p>		<p>19.30 Born to be Wild</p> <p>We meet the amateur naturalist who has turned his garden into a lizard empire.</p>
<p>20.27 BBC News and Regional News</p> <p>The latest national and international news stories from the BBC, followed by the weather.</p>		<p>20.00 Great Movie Mistakes</p> <p>Robert Webb uncovers the clangers and gaffes in Hollywood's biggest blockbusters.</p>	<p>20.00 Explosions: How We Shook the World</p> <p>Engineer Jem Stansfield investigates the science of explosions.</p>
<p>20.30 In with the Flynns</p> <p>Liam and Caroline work extra shifts, but who is looking after the kids?</p>	<p>20.30 Springwatch Unsprung</p> <p>Kate Humble, Chris Packham and Iolo Williams answer audience questions.</p>		

<p>21.00 The Apprentice</p> <p>Lord Sugar instructs the teams to build junk collection businesses.</p>	<p>21.00 Wonderland</p> <p>Film that climbs aboard with four families as they take to the road.</p>	<p>21.00 Cannabis: What's the Harm?</p> <p>Exploring the world of organised crime linked to the supply of cannabis in the UK.</p>	<p>21.00 Hidcote: A Garden for All Seasons</p> <p>The story behind Hidcote, the most influential English garden of the 20th century.</p>
<p>22.00 BBC News at Ten</p> <p>Latest national and international news, with reports from BBC correspondents worldwide.</p>	<p>22.00 The Apprentice: You're Fired</p> <p>This week's task of making money from rubbish ended with someone being dumped.</p>	<p>22.00 Kill Bill: Vol 2</p> <p>The assassin, The Bride, concludes her ruthless quest for revenge against her nemesis.</p>	<p>22.00 Nurse Jackie</p> <p>After breaking up with Eddie, Jackie tries to reconnect with her family.</p>

Skim and scan to quickly find the answers to the following:

1. If you miss the news at 1900 when can you next catch the news?
2. If you're interested in gardening, what programme might be of interest to you?



3. What time, and on what channel, can you catch The Apprentice?
4. When, on what which channel, can you see the weather forecast?
5. At what time, and on which channel, can you settle down and watch a film?

To study efficiently you must learn to vary your reading style and become proficient at each type of reading. By developing the ability to switch from one method of reading to another you will increase your studying efficiency.

Responding to what you're reading

Reading is not a passive activity. You should be thinking about, and forming a view on what you read.

- Do you agree with the author?
- What is the quality of the author's argument?
- Do you have a different point of view?
- What counter arguments could you use? What questions are coming to mind?

As mentioned previously, keep space in your note taking to include *your* evaluation of what you read.



Researching

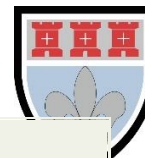
When you have been given an essay / assignment or task to research and then write, you may be faced by an abundance of articles and sources. Not all of these will be relevant, or credible sources. The following aims to give you some advice on how to search for credible and useful sources, and evaluate the validity of sources.

- If you type 'Shakespeare' into Google Scholar, you get about 1,660,000 results. This is clearly far too many articles to review.
- Including key words in the search bar, will help to refine your search. Adding the surname of an author 'Bradley' and the word 'Tragedy', for example, will narrow the search significantly to a narrower field of sources.

Evaluating your sources

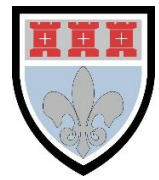
- Whatever sources you refer to, in order to help you with your research, you will need to consider the positives and negatives to those particular sources.
- Below is a list of positives and negatives for a range of sources you might you refer to in order to inform your thinking and planning.

Resource	Positive	Negative
Academic books	<ul style="list-style-type: none"> ▪ Reliable ▪ Published ▪ Accessible ▪ Often written by experts ▪ Less likely to be biased ▪ Informative ▪ Provides references to inform your research 	<ul style="list-style-type: none"> ▪ Time consuming ▪ Can be outdated ▪ More difficult to access than some other resources ▪ Self-published books may be less reliable
Documentaries	<ul style="list-style-type: none"> ▪ Easy to access ▪ Informative ▪ Great background information ▪ Provide lots of different resources ▪ Factual 	<ul style="list-style-type: none"> ▪ Hard to reference ▪ Do not provide detailed information ▪ Can be biased ▪ Need to check reliability
Images and cartoons	<ul style="list-style-type: none"> ▪ Quick ▪ Easy to access ▪ Informative ▪ Representative of time and place ▪ Tell a story ▪ Can be stereotypical of its time 	<ul style="list-style-type: none"> ▪ Can be biased ▪ Limited in information it can convey ▪ Need to check provenance (where it came from) ▪ Need to know context ▪ Can be manipulated
Journals	<ul style="list-style-type: none"> ▪ Informative ▪ Reliable 	<ul style="list-style-type: none"> ▪ Very specific ▪ Too scholarly



	<ul style="list-style-type: none"> ▪ Published ▪ Peer reviewed ▪ Short and more accessible than books ▪ Provides references to help inform your own research ▪ Written by experts ▪ Answer an academic question 	<ul style="list-style-type: none"> ▪ Harder to access
Newspapers	<ul style="list-style-type: none"> ▪ Current ▪ Easy to access ▪ Written by experts ▪ Informative 	<ul style="list-style-type: none"> ▪ Biased ▪ Limited information ▪ Sensationalist ▪ Not reliable as too current
Websites	<ul style="list-style-type: none"> ▪ Easy to access ▪ Easy to search/navigate ▪ Informative ▪ Easy to reference ▪ Dedicated reliable, academic websites ▪ Current 	<ul style="list-style-type: none"> ▪ Need to question reliability ▪ Anyone can create website ▪ Fake/hoax websites ▪ No review process on most websites ▪ Check domain of website for who has created and why ▪ Can change every day
Wikipedia	<ul style="list-style-type: none"> ▪ Quick ▪ Easy to use ▪ Current ▪ Good starting point ▪ Utilise references to inform own research ▪ Easy to access 	<ul style="list-style-type: none"> ▪ Anyone can contribute and edit articles ▪ It has no formal editors or peer review process ▪ Constantly changing ▪ Potentially very biased ▪ Articles are not translated between languages
YouTube	<ul style="list-style-type: none"> ▪ Easy to navigate ▪ Easily digestible information ▪ Informative ▪ Current ▪ Multi-media ▪ Can be created by experts, universities, etc. ▪ Some references given 	<ul style="list-style-type: none"> ▪ Very broad ranging ▪ Need to check origin/reliability ▪ Limited information

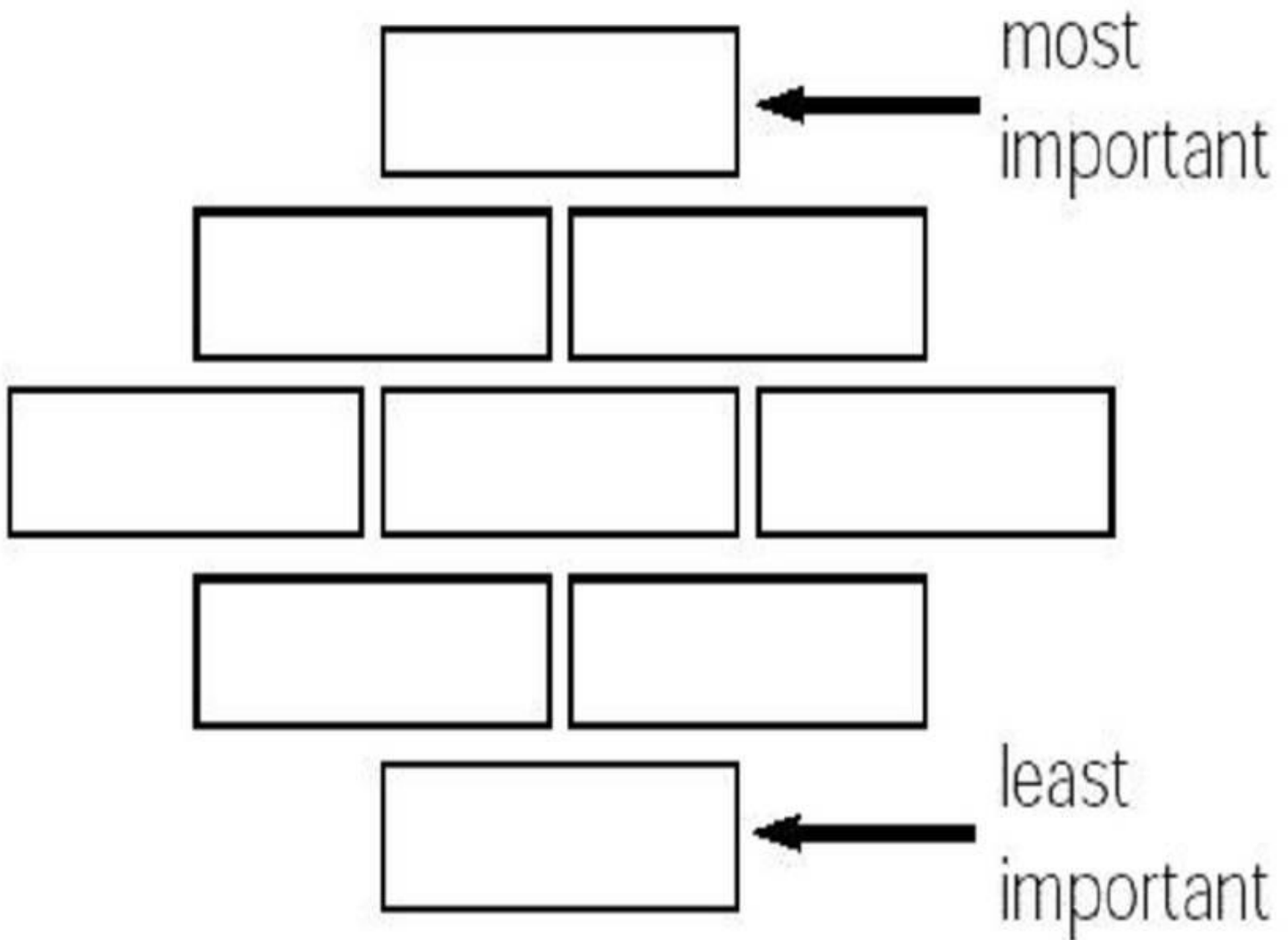
Source: Newcastle University

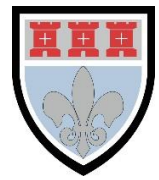


Task

- Thinking about the positives and negatives of the above sources, now think decide on a rank order – what sources do you think are most important when researching an essay? Rank the resources from most important to least important and note the justification for your rank order.

Wikipedia... You Tube... Websites... Images... Cartoons... Newspapers...
Journals... Documentaries... Academic Books





Boosting Your Memory

- The pace of learning when you start Sixth Form and university is very fast. You will be expected to work for a significant period outside of lessons as well as in lessons, lectures, seminars etc.
- In order to retain the vast knowledge-base you will learn about, you may want to develop the ways you remember things.
- Have a look at the following website:
<http://www.bbc.co.uk/scotland/brainsmart/brain/>

Task

- Watch the 3 videos available on this page, and make notes on: what happens to the brain when it learns something new, how to look after your brain, and how to keep stress under control.

Task

- You are about to do a small working memory test.
- A few letters will flash on your computer monitor for 3 seconds – keep your sheet face down.
- After the letters disappear, turn over your page and write down as many letters as you can remember.
- You can begin the memory test by clicking on the following link:

<https://faculty.washington.edu/chudler/stm0.html>

Test	The letters I remember are:
1	
2	
3	
4	
5	
6	



Read the following article from The Guardian. Make notes to help you answer the question: what advice can you take from this article to help your memory and long-term learning?

What every teacher should know about ... memory

In a new series of articles on how psychology research can inform teaching, Bradley Busch picks an academic study and makes sense of it for the classroom. This time: a project on long-term memory



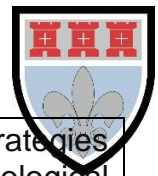
Techniques such as practice testing were found to be useful for retaining information, while rereading had less of an impact.

There is a wealth of psychology research that can help teachers to improve how they work with students – but academic studies of this kind aren't always easy to access, or to translate into the realities of classroom practice. This series seeks to redress that, by taking a selection of studies and making sense of the important information for teachers.

No one study or journal can provide a definitive answer, but they can help offer some guidance. Some of the studies I will choose in these articles are iconic, some quirky, some are large scale, and some have a small sample size. But all of them look to help answer the question: how can we help our students do better at school? We begin with a study on memory.

Long-term learning

How do our students learn? The ability to retain and recall information is central to improving memory, knowledge and learning. But do students know what works, and are they using the best strategies? In 2013, researchers from Kent State University, Duke University, University of Wisconsin and University of Virginia **published a review of hundreds of studies** to explore which strategies are most likely to lead to long-term learning.



This study is one of the most thorough and comprehensive appraisals on strategies that students employ to improve their memory. It is often the first piece of psychological research that we recommend teachers read in our work advising schools on learning techniques.

What are the main findings?

Two techniques were rated as being very effective for improving long-term memory:

Practice testing. This is where students have to generate an answer to a question. It can include past papers, multiple choice questions or doing practice essay answers. It's a technique that has been extensively researched and is consistently found to be one of the most effective ways to improve learning.

Distributed practice. Sometimes referred to as "spacing", distributed practice involves doing little bits of work often instead of a lot all at once (ie cramming). Essentially, students remember more if they spread out their learning; for instance, one hour a day for eight days rather than eight hours in one day.

Two techniques were found to be fairly effective strategies:

Elaborative interrogation. Asking "why is this true?" or "why might this be the case?" helps students think about the material and make connections to previously learned information. However, this technique does require students to have a good base knowledge for it to work effectively.

Interleaved practice. Interleaving is where students mix up either the types of problem or different subjects, so as to avoid "blocking" their time on just one type of question. This helps keep things fresh and makes it easier for students to identify similarities and differences between the materials they are studying.

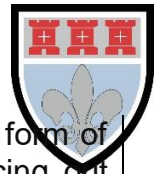
Finally, these two strategies were found to be not very helpful at all in improving students' ability to recall information at a later date:

Highlighting/underlining. Despite being the weapon of choice for many students, highlighting material often fails to lead to long-term learning. This is because it's often done on autopilot, doesn't help students make connections from previous learned material and doesn't help them make inferences on what they are learning. By itself, highlighting is not the worst technique – it's more a case of how students use it, with many excessively over-highlighting, making it more akin to colouring in.

Rereading. Although students may feel that they have learned something if they can point to a whole chapter they've read, it may not be as beneficial as they think. This is because people sometimes end up skim-reading, which doesn't require them to think very deeply about what it is they are looking at.

Related research

Numerous researchers from around the world have run studies that support these findings. For practice testing to be most effective, it has to be done at "low-stakes",

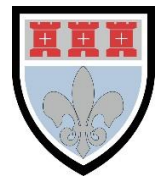


which means it isn't increasing stress levels of students and isn't used as a form of judgment on their abilities. Other research has supported the use of spacing out learning – found to be effective because it allows time for students to forget and relearn the material, which cements it into their long-term memory.

What does this mean for the classroom?

How can teachers use these findings? It will vary, of course, depending on the nature of your cohort and the subject you teach. But ideas include using the testing effect by setting up short quizzes at the start or end of a lesson. Meanwhile, look to revisit previous topics (distributed practice) – important now that students no longer do modular exams.

We need to teach our students what does and doesn't work. Each minute spent highlighting or re-reading is 60 seconds not spent doing something more effective. As the authors of this study state, "a premium is placed on teaching students content and critical-thinking skills, whereas less time is spent teaching students to develop effective techniques and strategies to guide learning... teaching students to use these techniques would not take much time away from teaching content and would likely be most beneficial if the use of the techniques was consistently taught across multiple content areas, so that students could broadly experience their effects on learning and class grades".



The following is taken from an online article found on *The Guardian* website. Read the article and make notes in the margin, in the space that has been provided for you.

Sleep on it

Sleeping well helps reinforce episodic memories – those associated with time and place. There is also substantial evidence that REM sleep plays a vital role in the consolidation of memories relating to learning motor skills, such as learning to play a musical instrument or ride a bike. Having a full night's sleep soon after gaining a new skill helps consolidate the processes involved so they can later be performed “on autopilot”.

Chill out

Stress affects memory in different ways depending on when the stressful event occurs. The rapid release of adrenaline as part of our “fight or flight” response can make us more attentive, but the slower release of cortisol disrupts memory-forming processes. A stressful event that occurs well before efforts to form memories can impair recall, whereas one shortly before or after the learning of new information can enhance it. And getting stressed out just before efforts to retrieve memories impairs our ability to do so. Yoga, meditation or other relaxation techniques may help.

Believe to remember

Positive thinking appears to boost memory performance – researchers at Harvard University found they could improve the performance of people in memory tests by subliminally presenting them with positive words. Priming others with negative words undermined their performance. Brain scans have shown differences in activity levels in brain regions during memory encoding, according to whether or not individuals believe they have good recall abilities or not.

Take a break

Memories can be undermined if the brain doesn't have enough downtime to consolidate them. More than a century ago, German scientists showed that people performed almost twice as well in memory tests if they took breaks. More recently, neuroscientists have shown that some amnesia patients and healthy volunteers are more able to retain lists of words if the task is followed by periods of quiet time.

Other ways to boost your memory

- **Focus on it.** This one might sound very obvious, but so many people get caught up in multi-tasking, that we often fail to do the one thing that will almost always improve your memory — paying attention to the task at hand. This is important, because your

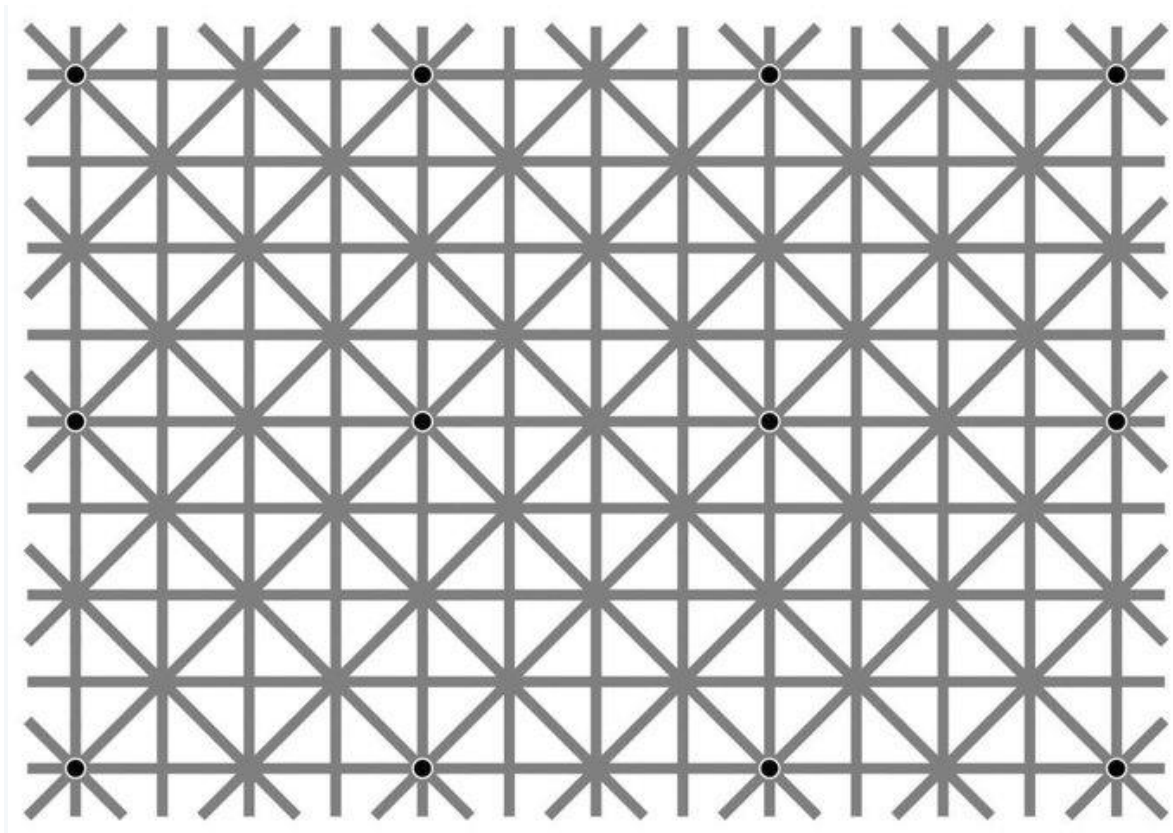


brain needs time to encode the information properly. If it never makes it into your memory, you won't be able to recall it later. If you need to memorize something, quit multitasking.

- **Repeat it.** One reason people who want to memorize something repeat it over and over again is because repetition (what psychologists sometimes refer to as “over learning”) seems to work for most people. It helps not to cram, though. Instead, repeat the information spaced out over a longer period of time.
- **Chunk it.** Divide the large amount of information into smaller chunks, and then focus on memorizing those chunks as individual pieces.
- **Organize it.** Our brains like organization of information. That's why books have chapters, and outlines are recommended as a studying method in school. By carefully organizing what it is you have to memorize, you're helping your brain better encode the information in the first place.
- **Use mnemonic devices.** There are a lot of these, but they all share one thing in common — they help us remember more complicated pieces of information through imagery, acronyms, rhyme or song. For instance, in medical school, students will often turn memorization of the bones in the body or symptoms of specific illnesses into sentences, where the first letter of each word corresponds with a specific bone or symptom.
- **Learn it the way that works for you.** People often get caught up in thinking there's a “one size fits all” learning style for memorizing new material. That's simply not the case — different people prefer different methods for taking in new information. Use the style that works for you, even if it's not the way most people study or try and learn new information. For instance, some people like to write things down when they're learning something new. Others may benefit more from recording what they're hearing, and going back to take more detailed notes later on at their own leisure.
- **Connect the dots.** When we learn, we often forget to try and make associations until later on. However, research has shown that memory can be stronger when you try and make the associations when you first take in the information. For instance, think about how two things are related, and the memory for both will be enhanced. Connect new information to existing information or experiences in your mind.
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Task: There are twelve black dots at the intersections in this image. Your brain won't let you see them all at once. How many can you see at once?



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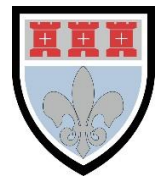
Task: Think about something you might have learnt this way in the past? Eg. The words to a song, because you have heard it a number of times, not on repeat, but spaced over a period of time, or the date of firework night because you remember the rhyme said around that time each year. Can you think of another example?

- **Chunk it.** Divide the large amount of information into smaller chunks, and then focus on memorizing those chunks as individual pieces.

Chunking Task: Can you remember this number?

1066007200601642

1. Cover it up and try to write it out



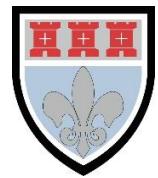
- 2a. Write out the first 4 digits
- 2b. Next 3 digits:
- 2c. Next 4 digits:
- 2d. Next 3 digits
- 2e. Last 2 digits:
3. Again cover it up and try to write out the number again.

This idea works for written information as well, breaking it down into smaller chunks or bullet points.

- **Organize it.** Our brains like organization of information. That's why books have chapters, and outlines are recommended as a studying method in school. By carefully organizing what it is you have to memorize, you're helping your brain better encode the information in the first place.
- **Use mnemonic devices.** There are a lot of these, but they all share one thing in common — they help us remember more complicated pieces of information through imagery, acronyms, rhyme or song. For instance, in medical school, students will often turn memorization of the bones in the body or symptoms of specific illnesses into sentences, where the first letter of each word corresponds with a specific bone or symptom.

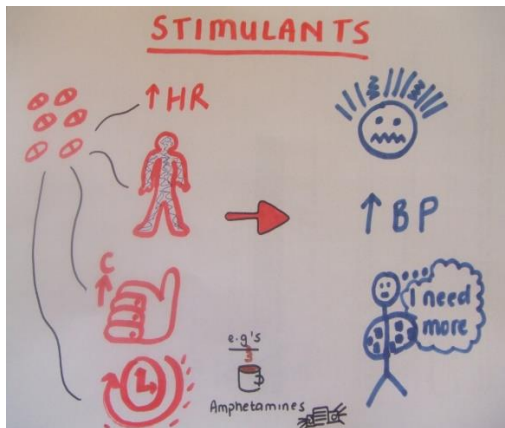
Task: Recall something you have learnt in the past using a mnemonic. Try to think about why this was successful to help you recall it today.

- **Learn it the way that works for you.** People often get caught up in thinking there's a "one size fits all" learning style for memorizing new material. That's simply not the case — different people prefer different methods for taking in new information. Use the style that works for you, even if it's not the way most people study or try and learn new information. For instance, some people like to write things down when they're learning something new. Others may benefit more from recording what they're hearing, and going back to take more detailed notes later on at their own leisure. Trying a variety of ways to learn information can also be helpful as you are then helping to commit it to memory by coming across it again in a different format.



Task: Changing the format

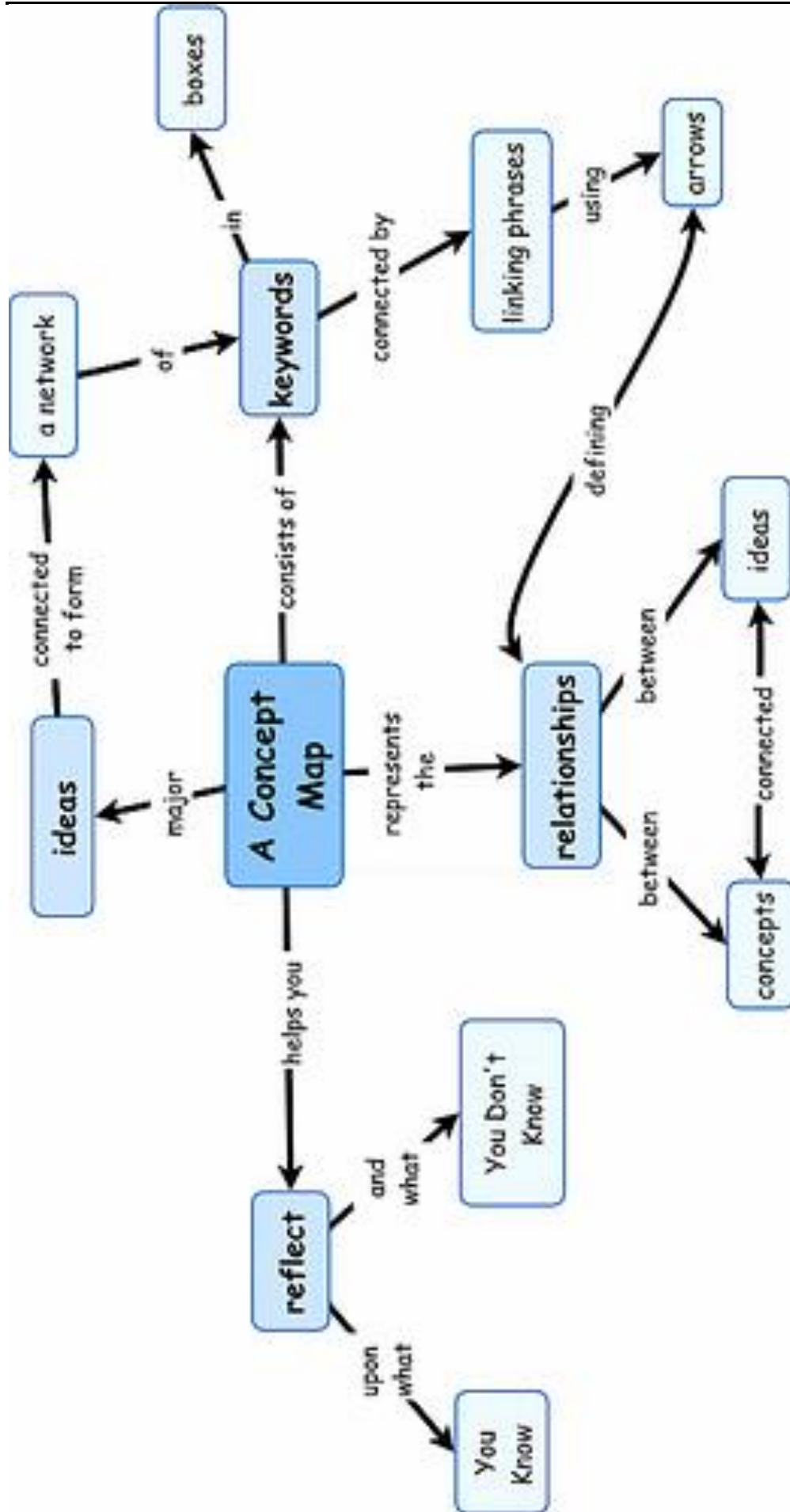
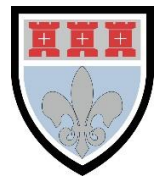
The diagram below is a changed format of the bullet points, as part of a memory aid. Can you match up the bullet points to the diagrams to see how this technique works?



- Stimulants - Main effects:
- They increase heart rate
 - They stimulate the nervous system
 - They increase your confidence
 - They can improve your reaction time
- Stimulants- Side Effects:
- They can cause increased hostility
 - Increased blood pressure
 - They are addictive
- Stimulants - Examples:
- Caffeine
 - Amphetamines

- **Connect the dots.** When we learn, we often forget to try and make associations until later on. However, research has shown that memory can be stronger when you try and make the associations when you first take in the information. For instance, think about how two things are related, and the memory for both will be enhanced. Connect new information to existing information or experiences in your mind.

Task – On the following pages are a concept map of concept map instructions and an example of a concept map in history. These diagrams are designed to connect new information to existing information of experiences in your mind and these associations help to increase your memory.





3. In the space below, arrange these key words into a concept map, spreading the words out so that connections can be made from one word to another. It doesn't need to have a 'central word'.

4. Use arrows to show the links between all the points and for each arrow write above these arrows the connecting ideas/phrases.



Time Management

- How you manage your time is vital to your success in Sixth Form / university.
- There are 336 hours in a fortnight. In Sixth Form, lesson time is 10 hours per fortnight per subject, which account for about 3% of this time. So how are you going to maximize the time you have? Obviously, sleeping, eating, spending time with your family and friends will take a significant amount of your time, but the point is, only a tiny fraction of your time will be spent in lessons, and we know that students who achieve the best grades at Sixth Form, and in higher education, are the ones who dedicate study time fruitfully, and prioritise effectively.

TASK

- The following task will allow you to evaluate how effectively you manage your time. Answer 'yes' or 'no' to the following, thinking about your typical working pattern or behaviour.

	Yes	No
Do you work out how many hours you will need to study each week?		
Do you meet deadlines that are set for homework / coursework / assignments?		
Do you begin working on longer pieces of work as soon as you get them?		
Do you write a daily 'to do list'?		
Do you prevent social activities from interfering with study time?		
Do you have a part time job that requires fewer than 10 hours a week?		
Do you set specific goals for study each week?		
Do you begin your study time with your most difficult assignment?		
Do you complete your studying during your most productive hours each day?		
Do you think of being a full time student as being the equivalent to being in full time employment?		

Total your score. For each 'yes', you score a point of 1. For a 'no', a score of 0. If your score is high, this indicates you have some very effective approaches to managing your time. If you have a low score, it will be helpful to follow some of the advice offered later in this booklet, to improve your time management.



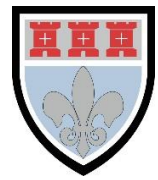
Audit of how you spend your time

	Your response
On average, how many hours are you studying outside of school, in the evening and at weekends?	
How many hours are you spending socializing / watching TV / on internet / social media?	
How many hours a week do you exercise?	
How many hours are you sleeping? (Are you getting the 8 hours a night that you should be?)	

- What do you consider to be a strength of how you use your time?
- What 2 things will you try to do in order to improve your time management?

To support your time management:

- **Set realistic goals.** Set realistic goals based on your own wants and needs. Decide what needs doing 'now', what needs doing 'soon' and what can be done 'later'. Keep a list of these different goals, and review them regularly.
- **Focus on process.** Focus on the process of an activity, not just the end result. Evaluate your success in terms of your enjoyment of it, not just your level of accomplishment.
- **Prioritise.** Prioritise your tasks and put your best effort into the tasks that are most important to you. Prioritise those areas that require your time and energy. Don't over expend on activities and work that you enjoy more, or are naturally good at.
- **Avoid procrastination.** Avoid looking for excuses to do other things. To help with this, try to approach your study by 'tasks' rather than time. Try avoid 'downing-tools' when something gets difficult. Persist, or ask for help, but keep going!



Skim and Scan Practice

British Council

https://www.teachingenglish.org.uk/sites/teacheng/files/RW4_Reading%20skills.pdf

Southampton University

https://www.elanguages.ac.uk/los/research/skim_reading_for_gist.html

BBC

<https://www.bbc.co.uk/teach/skillswise/skimming-and-scanning/zd39f4j>

University of Sussex

<http://www.sussex.ac.uk/skillshub/?id=334>

Open University

<https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=19202§ion=3.1>

Time Management Resources

Kent University

<https://www.kent.ac.uk/ai/ask/>

This is a useful resource that suggests that you should do and when, when you're set an assignment. When you enter the deadline for an essay, it gives you 'mini-deadlines' of what should be completed and when, in order to help you meet your final deadline.

Recommended Online Study Courses to Develop Study Skills (MOOCs)

Critical Thinking at University: An Introduction

<https://www.futurelearn.com/courses/critical-thinking-at-university>

Improving Your Study Techniques

<https://www.futurelearn.com/courses/improving-study-techniques>

An Essential Guide to Living at University

<https://www.futurelearn.com/courses/live-smart>